I CLAIM:

- 1. An environmental protection greenhouse with clean and airtight cultivation system comprising at least one air control equipment by using the energy of natural water to facilitate the heat exchange mechanism and one airtight greenhouse. The air control equipment is composed of an incoming water filtering pool (11), an incoming water pump (12), incoming water hose (13), air washing machine (14), drain (15), blower (16), high-pressure blowing hose (17), incoming air filtration device (18), and exhausting air filtration device (19). The airtight greenhouse is divided into a cultivating area (21), a seedling nursery area (22) and a harvest and quality control area (23).
- 2. An environmental protection greenhouse with clean and airtight cultivation system according to claim 1, wherein the air washing machine (14) comprising nozzles (141) and plate type heat exchange device (142). An environmental protection greenhouse with clean and airtight cultivation system according to claim 1, which has doors separating the different sections. In particular, there are two entrances to the airtight green house. Both of these entrances are guarded by double doors to prevent air flowing from one area to another directly.
- 3. An environmental protection greenhouse with clean and airtight cultivation system according to claim 1, which has continually winding cultivating ditches (211) that are parallel maximizing the number of trays in the cultivating area (21) and these are movable cultivating trays (212) on top of the cultivating ditches (211).
- An environmental protection greenhouse with clean and airtight cultivation system
 according to claim 1, wherein the seedling nursery area (22) comprising the seedling
 nursery trays (223), a vibrating and line-arranging machine (224) and an ultraviolet lamp
 (225).
- 5. An environmental protection greenhouse with clean and airtight cultivation system according to claim 1, wherein the harvest and quality control area (23) comprising a gas

- chromatography device (GC) (231) and a nutrient solution preparation system (31).
- 6. The apparatus according to claim 4, wherein the cultivating ditch (211) is a U-shaped groove and on the both sides of the cultivating ditch (211) edges contain slippery rails (215) to support the cultivating trays (212) and allowing the cultivating trays (212) to move. At the bottom of the groove there are a pipe (213) and several spray nozzles (214) for the nutrient solution delivery.
- 7. The apparatus according to claim 6, wherein the nutrient solution preparation system (31) comprising a filter (311), a heater (312), a cooler (313), a nutrient solution preparation tank (314) and a pump (315) for nutrient solution transportation.